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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,461	03/22/2004	Doug Finlay	SPEEP001	2923
21912	7590	09/22/2006	EXAMINER	
VAN PELT, YI & JAMES LLP 10050 N. FOOTHILL BLVD #200 CUPERTINO, CA 95014			BEHNCKE, CHRISTINE M	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/807,461

Applicant(s)

FINLAY, DOUG

Examiner

Christine M. Behncke

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Japanese reference JP09184729A</u> . |

DETAILED ACTION

1. This office action is in response to the application filed 22 March 2004, in which claims 1-35 were presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1, 2, 6, 7, 19, 20, 25-27, and 35** are rejected under 35 U.S.C. 102(e) as being anticipated by Adachi, US 2004/0220727.

Adachi discloses a method of broadcasting a digital traffic map comprising: transmitting to a plurality of receivers a first road segment having a first segment first endpoint and a second endpoint, and transmitting to a plurality of receivers a second road segment having a second segment first endpoint and a second endpoint (Figures 6-8, [0008], [0023]) wherein the first segment and the second segment are combined together to form a portion of the digital map ([0010], [0023], [0070]). Adachi further discloses wherein the first segment has a segment state ([0061]-[0064]); wherein the first segment had a segment state including accident information ([0018]); wherein the first segment is part of a polygon that encloses an area of interest (Figures 6-8); wherein the road segment endpoints are transmitted in a road segment packet ([0010],

Art Unit: 3661

[0022]-[0023]); wherein the road segment endpoints are transmitted in a road segment data packet that is comprised of a segment identifier, a first endpoint longitude and latitude, and a second endpoint longitude and latitude (Figures 14a,b and 20a,b); wherein the first segment has a segment state and the segment state is used to update an optimum trip plan ([0106]-[0108]); wherein the first segment has a segment state and the segment state is used to update an optimum route plan ([0106]-[0108]); wherein the first segment has a segment state and the segment state is used to update a digital map display ([0065]-[0067], [0106]-[0108]).

4. **(Claim 35)** Adachi discloses a method of receiving a digit traffic map comprising: receiving from a transmitter a first road segment having a first segment first endpoint and a second endpoint, and receiving from a transmitter a second road segment having a second segment first endpoint and a second endpoint (Figures 6-8, [0008], [0023]) wherein the first segment and the second segment are combined together to form a portion of the digital map ([0010], [0023], [0070]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 11 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Adachi et al. in view of Fleck et al., US 6,012,012.

Adachi et al. discloses transmitting road segment information to a user wherein in the road segment and digital map source is a database. Adachi et al. does not disclose wherein the databases are explicitly public or private. However, Fleck et al. teaches it was well known in the navigational art to one of ordinary skill for the remote control center that allocates the traffic information to the users to utilize both public and private databases to provide further and more accurate information for all relevant roadways of interest (column 7, lines 8-39).

Claim Rejections - 35 USC § 102

7. (Claims 1, 3, 4, 8-10, 13-15, 19-27, 30 and 35) are rejected under 35 U.S.C. 102(e) as being anticipated by Knockeart et al., US 6,970,783.

Knockeart et al. discloses a method of broadcasting and receiving a digital traffic map comprising: transmitting to a plurality of receivers a first road segment having a first segment first endpoint and a second endpoint, and transmitting to a plurality of receivers a second road segment having a second segment first endpoint and a second endpoint (column 5, lines 53-61 and column 10, lines 56-65) wherein the first segment and the second segment are combined together to form a portion of the digital map (Figure 8, column 5, lines 53-61). Knockeart further discloses wherein the segment state varies over time (column 34, lines 10-45); the segment state includes speed information (column 30, lines 27-30); the segment state includes road condition information (column 41, lines 37-63); and a transmitter transmits an updated segment state based on a real-time measurement (column 34, lines 10-45); the first segment has a segment state and the source of information for the segment state is a sensor (column

Art Unit: 3661

34, lines 10-45 and column 37, lines 35-47); the segment state is derived by processing information from a sensor (column 34, lines 10-45 and column 37, lines 35-47); the segment state is derived by processing information from a public or a private database (column 34, lines 10-45 and column 37, lines 35-47, column 36, lines 18-28); wherein the road segment endpoints are transmitted in a road segment data packet (column 5, lines 53-61) that is comprised of a segment identifier, a first endpoint longitude and latitude and a second endpoint longitude and latitude, a name and a road type (Figures 6, 7, column 15, line 48-column 16, line 17, column 5, lines 34-43, and column 6, lines 21-29); wherein the first segment has a segment speed state and the segment speed state is transmitted in a speed update information packet (column 30, lines 18-42) that is comprised of a segment identifier and a speed (column 30, lines 1-29); wherein the first segment has a segment state and a transmitter (communication system 250) that transmits an updated segment state that is used to update a database (column 34, lines 10-45); wherein the segment state is used to update an optimum trip plan (column 11, lines 20-33 and column 12, lines 15-37) and an optimum route plan (column 30, lines 30-42); and wherein the segment state is used to update a digital map display of an area near to the receiver location (column 37, lines 56-60).

Claim Rejections - 35 USC § 103

8. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Knockeart et al. in view of Gueziec, US 2006/1058330.

Knockeart et al. discloses the method of broadcasting previously described and further discloses wherein the traffic information transmitted from the server to the in-

Art Unit: 3661

vehicle unit for a first segment, having a segment state. Knockeart et al. does not disclose where the state includes weather information. However, Gueziec teaches a method of distributing traffic information to a plurality of users wherein the traffic information and map information includes the state of road and weather information ([0078]). It would have been obvious to one of ordinary skill in the art to combine the teachings of Gueziec with the method of Knockeart et al. because as Gueziec suggests to provide the user with a more accurate overview of the current road conditions, including weather which effects the driving conditions (snow and heavy winds) and thereby impact the traveler ([0078]).

Claim Rejections - 35 USC § 103

9. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Knockeart et al. in view of DeKock et al., and in further view of Koshizawa, US 5,661,472.

Knockeart et al. in view of DeKock et al. disclose a method of broadcasting a digital traffic map, wherein the transmitted segment states are derived from a speed sensor used to determine the speed of traffic over a roadway portion (Figures 1 and 2 of DeKock et al.). Wherein, it would have been obvious to one of ordinary skill in the art to use the traffic monitors of DeKock et al. because the addition of traffic information from monitors placed along a road side increases the amount of traffic information made available for updating a traffic database while not needing to rely on whether there are probe vehicles located at the road or not ([0056]). Neither Knockeart et al. or DeKock et al. disclose adjusting the speed data for a mounting angle of the sensor. However,

Koshizawa teaches and image processing device wherein the camera measurement is adjusted for the mounting angular error of the camera. It would have been obvious to one of ordinary skill to adjust the determined speed data of Knockeart et al. in view of DeKock et al. with an angular mounting error to acquire an accurate data measurement as taught by Koshizawa (column 2, line 51-column 3, line 55).

Claim Rejections - 35 USC § 103

10. **Claims 17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Knockeart et al., as applied to claim 1, in view of Mintz et al., US 2002/0082767.

Knockeart et al. discloses the method of broadcasting previously described and further discloses wherein the traffic information transmitted from the server to the in-vehicle unit for a first segment, having a segment state, wherein the segment state is derived from speed determined by a sensor. Knockeart et al. does not disclose where the segment state is derived by converting a raw speed to an effective speed. However, Mintz et al. teaches a method of distributing traffic information wherein the traffic information is derived from acquired raw speeds from probe vehicles and the raw speed is converted to an effective speed ([0137] and [0270]). It would have been obvious to one of ordinary skill to use the teachings of Mintz et al. with the method of Knockeart et al. because as Mintz et al. suggests the processing of raw data at the central location instead of at the individual probes frees more processing space and memory in the probe vehicle and can be used to provide more accurate maps ([0270]).

Claim Rejections - 35 USC § 103

11. **Claims 28 and 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Knockeart et al., as applied to claim 1, in view of Kodani et al., US 7,054,746.

Knockeart et al. discloses the method of broadcasting previously described and further discloses wherein the traffic information transmitted from the server to the in-vehicle unit for a first segment, having a segment state. Knockeart et al. does not disclose updating a map whose detail level depends on size of an area displayed or the user selection. However, Kodani et al. teaches updating a plurality of user displays with map information wherein the user selects the display level and size of the area displayed in a display (column 7, line 63-column 8, line 13) and the map display is updated depending on the size of the area displayed (Figures 13 and 25). It would have been obvious to one of ordinary skill in the navigation art to combine the teachings of Kodani et al. with the method of Knockeart et al. because as Kodani et al. suggests, limiting the updating of the map display by the size of the area displayed allows the user to control the frequency of the updating and thereby the cost of communication to the server for the updates (column 1, lines 47-55).

Claim Rejections - 35 USC § 103

12. **Claims 31-33** are rejected under 35 U.S.C. 103(a) as being unpatentable over Knockeart et al., as applied to claim 1, in view of DeKock et al., US 2006/0074546 and in further view of Mintz, US 2002/0082767.

Knockeart et al. discloses the method of broadcasting previously described and further discloses wherein the traffic information transmitted from the server to the in-vehicle unit for a first segment, having a segment state, is indicated using one of a

Art Unit: 3661

variety of techniques including icons and color. Knockeart et al. does not disclose that the color indicating the traffic information corresponds to the segment speed state.

However, DeKock et al. teaches a method of distributing traffic information to a plurality of users wherein the traffic information is indicated by the use of colors and patterns of the displayed road segment to represent the average vehicle speeds of the displayed road segment ([0053], Figures 6 and 8). Mintz also teaches the display of velocity of a corresponding road section associated with a selected color or a gray scale. It would have been obvious to one of ordinary skill in the art to combine the method of Knockeart et al. with the teachings of DeKock et al. and Mintz because as DeKock et al. and Mintz suggests the use of different colors and patterns to display the traffic information allows the user to quickly and intuitively understand the traffic conditions.

Claim Rejections - 35 USC § 103

13. **Claim 34** is rejected under 35 U.S.C. 103(a) as being unpatentable over Knockeart et al., as applied to claim 1, in view of DeKock et al. and Mintz et al., and in further view of Japanese Abstracted Publication No. JP 09184729A.

As applied in claims 31 and 33 DeKock et al. and Mintz et al. teaches the use of colors and patterns to display traffic information on a displayed navigation map corresponding to the speed on a map display. Neither Knockeart et al., Mintz et al., or DeKock et al. suggest allowing the user to select the colors or the pattern corresponding to the speeds on the map display. However, JP 09184729A teaches allowing the user to select the map and background colors of a displayed map when the vehicle is stationary. It would have been obvious to one of ordinary skill in the art to allow the user

Art Unit: 3661

to select the background and then corresponding display colors of the display maps so the user may customize the display to their particular liking.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (571) 272-8103. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMB



THOMAS BLACK
SUPERVISORY PATENT EXAMINER